Abstract 23

Size does not matter; Skeletal muscle index is not a predictor of renal function following living donor nephrectomy

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Introduction: Living donor nephrectomy affords patients with chronic renal impairment a vital opportunity to achieve normal renal function, avoid dialysis & improve quality of life. Our aim is to evaluate if skeletal muscle mass impacts postoperative renal function in patients undergoing living donor nephrectomy.

Methods: Potential donors undergo CT angiography as part of their preoperative assessment. Dedicated software (Horos) was used to calculate skeletal muscle area at the L3 vertebrae which was corrected for height to derive the skeletal muscle index (cm²/m²). Sarcopenia was defined as skeletal muscle index <55 cm²/m² and <39 cm²/m² for males & females respectively. Correlation of skeletal muscle index and postoperative renal function at two intervals, 6–12 weeks and at 12 months, was assessed as well as gender, age, body mass index (BMI) and hypertension.

Results: Between January 2010 to December 2019, 275 patients (148 female, 127 male) were included in the analysis following exclusions. Male donors were more likely to be younger (42.4 vs 47.5 years) and overweight (70% vs 46%) than female donors (p < 0.0001). Multivariate logistic regression showed lower age to be independently predictive of better recovery of renal function at 12 months (OR 1.1, p < 0.005) with no association seen with skeletal muscle index, BMI, gender or hypertension.

Conclusion: These results highlight that skeletal muscle, hypertension and BMI in patients undergoing living donor nephrectomy do not impact on recovery of renal function. This data offers valuable information on recovery which may facilitate the consent process and patient selection in those considering living kidney donation.

Abstract 24

A departmental review of the quality of information contained in multiparametric prostate MRI requests and reports

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Introduction: Multiparametric magnetic resonance imaging (mpMRI) has been increasingly recognised as an important tool in the diagnosis of prostate cancer. European Association of Urology (EAU) guidelines recommend pre-biopsy mpMRI in both biopsy-naïve patients and patients with previous negative biopsies, and that PI-RADSv2 guidelines for image acquisition and reporting should be adhered to. PI-RADSv2 guidelines recommend that important clinical information including prostate-specific antigen (PSA) levels, examination findings, and biopsy information should be included in mpMRI requests. PSA-density (PSAD) is a strong predictor of prostate cancer risk, and can be calculated using mpMRI imaging.

Methods: All prostate mpMRIs performed by radiology services in Galway University Hospital between 1st September 2019 and 1st March 2020 were reviewed. Referrals from external centres, non-Urology services, and indications other than workup for prostate cancer were excluded. Referrals and reports were analysed for the presence of the following parameters: PSA-results, examination findings, biopsy information, PI-RADS score, prostate volume, and PSAD.

Results: A total of 586 mpMRIs were performed, and of these, 546 were included. Three hundred and seventy-three (68%) of patients had not had a previous mpMRI. PSA value was provided in 497 (91%) of requests, exam findings in 355 (65%), and biopsy information in 452 (82%). PI-RADS score was included in 224 (41%) of reports, prostate volume in 178 (32.6%), and PSAD in 106 (19%).

Conclusion: This project demonstrates that great variation in the quality of information contained in both requests and reports for prostate mpMRIs exists within our service. We aim to streamline this process by collaborating with our radiology colleagues to develop a request and report proforma for our radiology system.

References

Abstract 25

Percutaneous thermal ablation of small renal tumours: A single centre experience

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Introduction: Percutaneous radiological ablative treatment including radiofrequency ablation, microwave ablation and cryotherapy is one of the management options for small renal cell carcinomas (RCC).

Aim: Evaluate clinical and oncological outcomes after local ablative treatment of small renal masses in our unit.

Methods: The PACS system was used to identify all patients who underwent ablative in-situ treatment of the kidney. Data on patient age, pre-ablative biopsy histology, pre and post procedure creatinine, surveillance scan interval and response to treatment were collected retrospectively.

Results: A total of 49 patients between March 2013 and March 2021 were identified. Two patients that underwent ablations of nephrectomy bed recurrence and two patients that had metastatic disease at the time of ablation were excluded from analysis. Median age was 71 years (Range 35–81), 22% of patients were female. The majority (53%) of patients had low grade clear cell, 22% had chromophobe, 11% had papillary, 9% were RCC of unclear type, 4% were non-diagnostic and 1 patient had oncocytoma on biopsy. Mean tumour size was 1.8 cm (1.5–5.2). Overall complication rate was 6.6% (Claven Dindo 3a and 1). Median creatine pre-procedure was 88 (57–792) and post procedure was 92 (53–748). Recurrence free survival was 95.6%, two patients (4.4%) had treatment failure identified on initial surveillance imaging requiring repeat ablation. Cancer Specific Survival was 100% and Overall survival was 95.6%.

Conclusion: Local radiological treatment is a successful low risk management option for patients with appropriately selected small renal masses.

Abstract 26

Evaluating a “virtual” urology out-patient clinic to address delays in review patients

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Introduction: Outpatient department (OPD) reviews are timely and costly, as well as inconvenient to certain patients. The increasing